

U.S. Patent Application No. 09/869,454
Amendment After Final dated October 17, 2003
Reply to Office Action dated June 17, 2003

REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

The amendments to the claims further clarify what the applicants regard as their invention. Full support for this amendment can be found in the application, including the claims as originally filed, as well as pages 7-9 of the present application. Accordingly, no questions of new matter should arise and entry of this amendment is respectfully requested.

The amendments to the claims do not raise any questions of new matter or patentability. Furthermore, the amendments do not necessitate any need for further searching or examination since the Examiner has already considered such language by way of claim 1 and claim 6, for instance. Furthermore, the amendment places the application in immediate condition for allowance, or at the very least, in a better condition for appeal. Accordingly, for these reasons, this amendment should be entered by the Examiner. The Examiner is respectfully requested to do so.

Claims 1-22 are pending in this application. The applicants appreciate that the Examiner has indicated that claim 4 is objected to. Claim 4 has been amended as an independent claim. Therefore, claim 4 is allowable.

At page 3 of the Office Action, the Examiner rejects claims 1-3 and 5-10 under 35 U.S.C. § 102(b) as anticipated by, or in the alternative, under 35 U.S.C. § 103(a) as obvious over EP 0 544 233 (hereinafter the "EP reference"). The Examiner asserts that, the EP reference shows a fluorine-containing copolymer containing 10-80 mol% of a fluoroolefin and 2-70 mol% of an organosilicon compound. The Examiner further asserts that the formula II in claims 6-8 is optional. For the

U.S. Patent Application No. 09/869,454
Amendment After Final dated October 17, 2003
Reply to Office Action dated June 17, 2003

following reasons, this rejection is respectfully traversed.

The EP reference does not relate to sterically hindered alkenyl or alkenyl ether organo-silane co-monomers. To further emphasize this point, the Examiner's attention is directed to page 4, line 10 of the EP reference, which specifically states that the type of alkoxy groups present are the type of organic groups that would hydrolyze to hydroxyls. Thus, this would be a clear sign that the organo-silane compounds of the EP reference are not sterically hindered. Furthermore, the Examiner's attention is directed to page 3, lines 41-43 of the EP reference, which specifically states that the organo-silane compound has an olefinic unsaturated bond and a group hydrolyzable to hydroxyl. This is quite different from the sterically hindered groups exemplified in claims 6-8. Moreover, to further assist the Examiner with this difference in chemistry, claim 1 now recites that the organo-silane compound has an alkoxy group which contains a branched alkyl, cycloalkyl, or a heterocyclic group. It is respectfully submitted that none of these types of alkoxy groups are set forth in the EP reference. The specific examples set forth at pages 3 and 4 of the EP reference are clearly linear and are not branched and they are not cycloalkyl or heterocyclic. Accordingly, the EP reference does not teach or suggest the subject matter of claim 1 or the claims dependent thereon. For these reasons, this rejection should be withdrawn.

At the bottom of page 3 of the Office Action, the Examiner then rejects claims 1-3, 5-17, and 20-22 under 35 U.S.C. § 103(a) as being obvious over EP 0 544 233 in view of Kobayashi et al. (U.S. Patent No. 5,859,123). The Examiner relies on the EP reference in the same manner as in the earlier rejection above. Furthermore, the Examiner asserts that the EP reference shows the use of a pigment which would inherently react with the silane group of a fluoro-copolymer to obtain a white

U.S. Patent Application No. 09/869,454
Amendment After Final dated October 17, 2003
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color. The Examiner further asserts that the EP reference, in example 1, shows other monomers such as vinyl butyrate or vinyl ether. The Examiner then relies on Kobayashi et al. to assert that this reference shows various sterically hindered organosilanes and functional substituents. Thus, the Examiner asserts that it would be obvious to one of ordinary skill in the art to utilize the white pigment of the EP reference and to utilize other sterically hindered organosilanes of Kobayashi et al. in the EP reference. The Examiner further asserts that the EP reference shows alkoxy groups that would encompass an isopropoxy or ter-butoxy group of Kobayashi et al. For the following reasons, this rejection is respectfully traversed.

The comments set forth above with respect to the EP reference apply equally here. Furthermore, one skilled in the art would not combine the teachings of the EP reference with Kobayashi et al. First of all, the EP reference relates to organic solvent-based reactions. This is clearly stated throughout the EP reference, especially at page 4, lines 29-36, where the radical polymerization is carried out using solution polymerization or block polymerization with the use of an organic solvent. Furthermore, the examples of the EP reference clearly use a non-aqueous solvent, for instance, xylene. Unlike the EP reference, Kobayashi et al. relates to water-based emulsions, which is a significantly different type of chemistry. One skilled in the art clearly knows emulsion polymerizations and solution polymerizations are very different from each other and involve different techniques. Furthermore, with regard to fluoro chemistry, it is even more different when making the shift from emulsion polymerization to solution polymerization involving non-aqueous solvents compared to aqueous reactions. Accordingly, Kobayashi et al. and the EP reference are not combinable and one skilled in the art would consider the two technologies

U.S. Patent Application No. 09/869,454
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uncombinable.

Furthermore, as stated above, no alkoxy group in the EP reference is branched. Contrary to the Examiner's position, no group mentioned in the EP reference encompasses any branched alkyl groups or iso groups in the alkoxy location. All of the examples set forth in the EP reference clearly are linear organo-silicon groups as set forth at pages 3 and 4 of the EP reference. In addition, as stated above, this makes complete sense since the EP reference wishes to hydrolyze to a hydroxyl group. Thus, the chemistry set forth in the EP reference on this point is completely different from Kobayashi et al. The applicants also wish to point out to the Examiner that the Examiner's reference on page 4, line 6, does not encompass branched alkyl groups for the alkoxy portion of the organo-silicon group. The inventors are more than willing to discuss this matter in great detail with the Examiner by telephone should there be any remaining questions on this point.

Since the EP reference and Kobayashi et al. are not combinable, and even if combinable would not permit one to use branched alkyl groups in the EP reference, this rejection should also be withdrawn.

At page 4 of the Office Action, the Examiner then rejects claims 1-3 and 5-22 under 35 U.S.C. § 103(a) as being unpatentable over EP 0 544 233 in view of Kobayashi et al., and further in view of Maruyama et al. (US Patent No. 5,973,090) and Charleux et al. (U.S. Patent No. 6,353,065). The Examiner relies on the EP reference in Kobayshi et al. as in the above rejection. The Examiner then relies on Maruyama et al. to assert that other ingredients as set forth for instance in claim 18 are shown by Maruyama et al. and Charleux et al. Thus, the Examiner asserts that it would have been obvious to one of ordinary skill in the art at the time of the instant invention to

U.S. Patent Application No. 09/869,454
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utilize various ingredients, such as buffer agents and disodium phosphate, in the EP reference. For the following reasons, this rejection is respectfully traversed.

The above arguments with respect to the EP reference and Kobayashi et al. apply equally here and for those reasons alone, this rejection should be withdrawn. In addition, it is respectfully noted that Maruyama et al. relates to the use of organic solvents, which again would be in direct conflict with the aqueous reactions set forth in Kobayashi et al. Furthermore, Charleux et al. relates to an emulsion polymerization which would be in direct conflict with the organic solution polymerizations of the EP reference. Accordingly, there are many reasons why one skilled in the art would not combine these various teachings. Thus, for the reasons previously presented above and these reasons, this rejection should be withdrawn as well.

The Examiner then, at page 5 of the Office Action, indicates that claim 4 is objected to, but otherwise would be allowable. As stated above, claim 4 has been amended to become an independent claim. Therefore, claim 4 should be allowed. Furthermore, based on the above comments, the applicants believe that the remaining claims should also be allowable.

The Examiner is encouraged to contact the undersigned by telephone should there be any other remaining questions with regard to the patentability of the claimed invention over the cited references, especially the comparison between the EP reference and the topic of branched alkoxy groups.

U.S. Patent Application No. 09/869,454
Amendment After Final dated October 17, 2003
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CONCLUSION

In view of the foregoing remarks, the Applicants respectfully request the reconsideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,



Luke A. Kilyk
Reg. No. 33,251

Atty. Docket No. IR3569 (3055-001-01)
KILYK & BOWERSOX, P.L.L.C.
53 A East Lee Street
Warrenton, VA 20186
Tel.: (540) 428-1701
Fax: (540) 428-1720

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